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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/524,778

02/16/2005

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ABE-026

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01/14/2008

EXAMINER

MALEKZADEH, SEYED MASOUD

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

01/14/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/524,778	<b>Applicant(s)</b> UMENO ET AL.	
	<b>Examiner</b> SEYED M MALEKZADEH	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 25 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 20-22, 24-26, 28-30, 32-34, 36-38 and 40-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 20-22, 24-26, 28-30, 32-34, 36-38 and 40-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

Claims 20-22, 24-26, 28-30, 32-34, 36-38, 40-45 are pending in this application.

In view of applicant's response filed on 10/25/2007 following rejections is maintained for the reasons of records as given in previous office action, mailed on 07/26/2007.

- Rejection of claims 20 and 24 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484) in view of prior art submitted by the applicants JP (2003-297840)
- Rejection of claims 21 and 25 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484) in view of JP (2003-297840) and further in view of Haas et al (US 4,119,441)
- Rejection of claims 22 and 26 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484) in view of JP (2003-297840) and further in view of Asayama et al (US 6,641,888)

- Rejection of claims 28, 32, 36, 40, and 41 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484) in view of JP (2003-297840) and further in view of Momoi et al (US 2002/0024152)
- Rejection of claims 29 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484), JP (2003-297840), Haas et al (US 4,119,441), and further in view of Momoi et al (US 2002/0024152)
- Rejection of claims 30 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484), JP (2003-297840), Asayama et al (US 6,641,888), and further in view of Momoi et al (US 2002/0024152)
- Rejection of claims 33, 37, and 42-43 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US 2003/0106484), JP (2003-297840), Momoi et al (US 2002/0024152), and further in view of Haas et al. (US 4,119,441)
- Rejection of claims 34, 38, 44-45 under 35 U.S.C. 103 (a) as being unpatentable over Fusegawa et al. (US

2003/0106484), JP (2003-297840), Momoi et al. ('152),  
and further in view of Asayama et al (US 6,641,888)

### **Response to Arguments**

Applicant's arguments filed on 10/25/2007 have been fully considered but they are not persuasive.

Applicants argue that neither of Fusegawa et al. (US 2003/0106484), JP (2003-297840), Haas et al (US 4,119,441) Asayama et al (US 6,641,888), and Momoi et al (US 2002/0024152) teach or suggest the expression relating the interstitial oxygen concentration and temperature recited in the instant application.

This is not found persuasive because applicants attention is drawn to the point that non of the recited references Fusegawa et al. (US 2003/0106484), JP (2003-297840), Haas et al (US 4,119,441) Asayama et al (US 6,641,888), and Momoi et al (US 2002/0024152) has not been used alone, but combination rejection made over Fusegawa et al. (US 2003/0106484) in view of JP (2003-297840) clearly teaches a manufacturing method of a silicon wafer, in which a silicon wafer that has been sliced from a

silicon single crystal is heat treated in an oxidizing atmosphere wherein there is a relationship between oxygen concentration and heat treatment temperature (T) as recited in previous office action. Therefore, Fusegawa et al. (US 2003/0106484) in view of JP (2003-297840) teaches the limitations of claims 20 as claimed, and therefore, claims 20-22, 24-26, 28-30, 32-34, and 40-45 maintained rejected.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

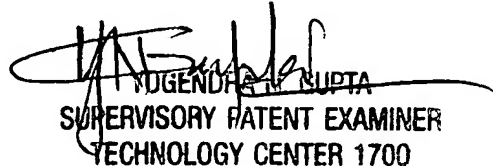
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on (571) 272-1316. The fax number for the organization where this application or proceeding is assigned is 571-272-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SMM

  
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